

REMARKS/ARGUMENTS

Claims 1, 3-8 and 10-13 are pending, claims 7, 8 and 10-13 having been withdrawn from consideration. By this Amendment, claims 2 and 9 are cancelled, and claims 1, 3-8 and 10-13 are amended. Support for the amendments to claims 1, 3-8 and 10-13 can be found, for example, in original claims 1-13. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Withdrawn Claims

For the reasons set forth below, Applicants submit that all pending claims presently subject to examination are in condition for allowance. Because the withdrawn claims depend from, and thus recite all features of, allowable claim 1, rejoinder and allowance of claims 7, 8 and 10-13 are respectfully requested.

Objection to the Claims

The Office Action objects to claims 2-5 as including informalities. By this Amendment, claim 2 is cancelled, rendering the objection moot as to that claim. Claims 3-5 are objected to solely for the dependency from claim 2. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

Rejection Under 35 U.S.C. §102

The Office Action rejects claim 1 under 35 U.S.C. §102(b) over U.S. Patent No. 5,288,804 to Kim et al. ("Kim"). Applicants respectfully traverse the rejection.

Claim 1 recites "[a] two-pack type plastisol composition, comprising: a liquid composition (LA); and a liquid composition (LB); wherein: the plastisol composition after

mixing the compositions (LA) and (LB) has a gelation time, as measured at 30° C, of one hour or less; the liquid composition (LA) comprises fine acrylic polymer particles (A) and a plasticizer (B) as a dispersion medium in which the particles (A) are substantially insoluble at room temperature, provided that the dispersion medium (B) may have dissolving power to the particles (A) when heated; and the liquid composition (LB) comprises an organic solvent (C) having sufficiently high dissolving power to dissolve the particles (A) at room temperature" (emphasis added). Kim does not disclose or suggest such a composition.

Kim discloses a composition including a first component including a compound comprising at least two acetoacetate groups, and a second component including a compound comprising at least two groups that will react with an acetoacetate group. *See Kim*, Abstract. The Office Action asserts that the composition of Example 25 of Kim anticipates claim 1. *See* Office Action, page 4. In Example 25 of Kim a polyacetoacetate according to Example 2 is mixed with an aromatic ketimine according to Example 20 and an aliphatic ketimine according to Example 21. *See Kim*, column 17, lines 31 to 36 and 45 to 47.

As indicated above, claim 1 requires that the liquid composition (LA) include fine acrylic polymer particles (A) dispersed in a plasticizer (B). The acrylic polyacetoacetate of Example 2 of Kim, which is employed in Example 25, is in the form of a viscous liquid, not fine particles, as recited in claim 1. *See Kim*, column 9, lines 60 to 61. There is no indication in Kim that the acrylic polyacetoacetate could or should be provided in the form of fine particles dispersed in a plasticizer. Claim 1 further requires that the liquid composition (LB) comprises an organic solvent (C). The second component in Example 25 of Kim, which apparently includes the aromatic ketimine of Example 20 and the aliphatic ketimine of Example 21, is not an organic solvent but rather a cross-linker. *See Kim*, column 17, line 37. There is no indication in Kim that an organic solvent should be provided instead of or in addition to the described cross-linkers. In Kim, gelation occurs by a cross-linking reaction

between polymers and cross-linker(s). This gelation mechanism is quite different from the gelation mechanism employed in claim 1 and, thus, Kim does not provide for the particular components that are recited in claim 1.

The two-component system of Example 25 of Kim does not include a composition corresponding to the liquid composition (LA) of claim 1, or a composition corresponding to the liquid composition (LB) of claim 1. Kim does not disclose or suggest each and every feature of claim 1.

A plastisol including fine particles of a thermoplastic resin that are dispersed in a plasticizer is particularly effective for use in forming coatings and moldings because the plastisol has high flowability at room temperature and gels in a short time by heating. *See* present specification, paragraph [0002]. In the composition of claim 1, gelation occurs when the organic solvent (C) in the liquid composition (LB) dissolves the fine acrylic polymer particles (A) in the liquid composition (LA). The present inventors discovered that, by providing the liquid composition (LA) and the liquid composition (LB) in separate containers (the "two-pack" configuration), a long pot life can be achieved. *See* present specification, paragraph [0010]. Moreover, by including the organic solvent (C), which has a high dissolving power for the fine acrylic polymer particles (A), in the liquid composition (LB), upon mixing the liquid composition (LA) and the liquid composition (LB), gelation occurs in a short period of time at room temperature. *See* present specification, paragraph [0010]. Kim does not disclose or suggest the particular combination of features recited in claim 1, and does not recognize the benefits stemming therefrom.

As explained, claim 1 is not anticipated by Kim. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejections Under 35 U.S.C. §102/§103

A. Takegawa

The Office Action rejects claims 1, 2 and 6 under 35 U.S.C. §102(b), or in the alternative under 35 U.S.C. §103(a), over U.S. Patent No. 4,386,992 to Takegawa et al. ("Takegawa"). By this Amendment, claim 2 is cancelled, rendering the rejection moot as to that claim. As to the remaining claims, Applicants respectfully traverse the rejection.

Claim 1 is set forth above. Takegawa does not disclose or suggest such a composition.

Takegawa discloses a two-part adhesive comprising an aqueous emulsion adhesive and a gelling agent. *See* Takegawa, Abstract. As indicated above, claim 1 requires that the liquid composition (LA) include fine acrylic polymer particles (A) dispersed in a plasticizer (B). While the aqueous emulsion adhesive of Takegawa may include acrylates (*see, e.g.,* Takegawa, column 4, lines 18 to 19), the polymer is not dispersed in a plasticizer. Accordingly, Takegawa fails to disclose a system including a composition corresponding to the liquid composition (LA) of claim 1. Takegawa does not disclose or suggest each and every feature of claim 1.

Applicants note that the two-part adhesive of Takegawa is not a plastisol, as recited in claim 1. While Takegawa appears to indicate that the disclosed gelling agent could include water-soluble organic solvents (*see, e.g.,* Takegawa, column 2, lines 35 to 46), only Preparation 5 (glacial acetic acid) appears to include such a water-soluble organic solvent (*see* Takegawa, Table 1). The remaining gelling agents include components other than organic solvents that are provided as aqueous solutions including at least 90 wt% of water. *See* Takegawa, Table 1. Although the gelation mechanism in Takegawa is not known, Applicants submit that the high water content of the employed gelation agents suggests that the mechanism is different from the gelation mechanism employed in the composition of

claim 1. A skilled artisan would not have been led to the composition of claim 1 by Takegawa.

As explained, claim 1 is not anticipated by and would not have been rendered obvious by Takegawa. Claim 6 depends from claim 1 and, thus, also is not anticipated by and would not have been rendered obvious by Takegawa. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Wilkins

The Office Action rejects claims 1, 2 and 4 under 35 U.S.C. §102(b), or in the alternative under 35 U.S.C. §103(a), over GB 1,1527,436 to Wilkins ("Wilkins"). By this Amendment, claim 2 is cancelled, rendering the rejection moot as to that claim. As to the remaining claims, Applicants respectfully traverse the rejection.

Claim 1 is set forth above. Wilkins does not disclose or suggest such a composition.

Wilkins discloses a two-part cold-curing synthetic resin composition. *See* Wilkins, page 1, lines 11 to 12. The composition includes a "syrup A" and a "syrup B." *See* Wilkins, page 1, lines 54 to 56. Syrup A may include methyl methacrylate polymer, methyl monomer, and stabilizer (*see* Wilkins, page 1, lines 57 to 60), and syrup B may include a plasticizer and a polymerization catalyst (*see* Wilkins, page 2, lines 4 to 5). As indicated above, claim 1 requires that the liquid composition (LA) include fine acrylic polymer particles (A) dispersed in a plasticizer (B). One of ordinary skill in the art would understand that methyl methacrylate polymer is readily soluble in methyl monomer. Moreover, this is apparent from the teachings of Wilkins, which indicate that syrup A is a solution of methyl methacrylate polymer in methyl monomer comprising syrup. *See* Wilkins, page 1, lines 57 to 59. Accordingly, syrup A of Wilkins does not include fine acrylic polymer particles (A) dispersed in a plasticizer. Rather, Wilkins discloses a polymer dissolved in a monomer solution. Accordingly, Wilkins

fails to disclose a system including a composition corresponding to the liquid composition (LA) of claim 1. Wilkins does not disclose or suggest each and every feature of claim 1.

The Office Action asserts that syrup B of Wilkins may include dicyclohexyl phthalate, which corresponds to a plasticizer, as recited in claim 4. *See* Office Action, page 7. Applicants note that phthalates are exemplified in present specification as plasticizers that may be incorporated into the liquid composition (LA) of claim 1, and not plasticizers that may be used as an organic solvent in the liquid composition (LB). *See, e.g.*, present specification, page 16, lines 12 to 20. Applicants submit that one of ordinary skill in the art would not have been led to the composition of claim 1 by the teachings of Wilkins.

As explained, claim 1 is not anticipated by and would not have been rendered obvious by Wilkins. Claim 4 depends from claim 1 and, thus, also is not anticipated by and would not have been rendered obvious by Wilkins. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

#### Rejections Under 35 U.S.C. §103

##### A. Takegawa

The Office Action rejects claim 6 under 35 U.S.C. §103(a) over Takegawa. Applicants respectfully traverse the rejection.

For the reasons discussed above, Takegawa does not disclose or suggest each and every feature of claim 1. Accordingly, claim 1 would not have been rendered obvious by Takegawa. Claim 6 depends from claim 1 and, thus, also would not have been rendered obvious by Takegawa. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Kim

The Office Action rejects claims 2-4 and 6 under 35 U.S.C. §103(a) over Kim. By this Amendment, claim 2 is cancelled, rendering the rejection moot as to that claim. As to the remaining claims, Applicants respectfully traverse the rejection.

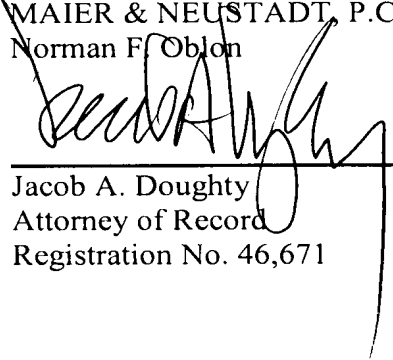
For the reasons discussed above, Kim does not disclose or suggest each and every feature of claim 1. Accordingly, claim 1 would not have been rendered obvious by Kim. Claim 3, 4 and 6 depend from claim 1 and, thus, also would not have been rendered obvious by Kim. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Conclusion

For the foregoing reasons, Applicants submit that claims 1, 3-8 and 10-13 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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